

ABSTRACT OF THE DISCLOSURE

A detachable support arm structure couples a computer-assisted navigation system reference array to an instrument, for example, a surgical instrument, such that the geometry between the reference array and the surgical instrument is predetermined and registration of the instrument in the navigation system does not require calibration each time the reference array and support arm structure is coupled to the instrument. The support arm structure includes a mounting interface engageable with a mounting interface on the instrument. Engagement of the mounting interfaces releasably secures and repeatably and accurately locates and fixes the support structure to the instrument in a predefined geometry in each of six degrees of freedom. The reference array includes at least one reference elements and is releasably securable to the support structure in a predefined geometry of the support structure relative to the reference array which repeatably and accurately locates and fixes the support structure relative to the reference array in each of six degrees of freedom.